IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1: deleted

Claim 8: deleted

Claim 9: deleted

Claim 10: deleted

Claim 14: deleted

Claim 19: deleted

Claim 20: deleted

Claim 26: deleted

Claim 34: deleted

Claim 37: deleted

Claim 64: deleted

Claim 65: deleted

Claim 67: deleted

Claims 2-7, 11-13, 15-18, 21-25, 27-33, 35-36, 38-63, 66, and 68-98: withdrawn.

Claim 99 (new) An isolated human-derived gene expressed in a cholinergic neuron which encodes a protein having high-affinity choline transporter activity.

Claim 100 (new): An isolated gene which encodes a protein comprising an amino acid sequence represented by Seq. ID No. 6,

Claim 101 (new): An isolated gene which encodes a protein comprising an amino acid sequence where one or a few amino acids are deficient, substituted or added in the amino acid sequence represented by Seq. ID No.6, and having high-affinity choline transporter activity.

Claim 102 (new): Substantially Purified and human derived DNA comprising a base sequence

represented by Seq. ID No. 5 or its complementary.

Claim 103 (new): Substantially Purified and human-derived DNA encoding a protein that hybridizes with DNA constituting the gene according to claim 102 under stringent conditions, and has high affinity choline transporter activity

Claim 104 (new): A human-derived recombinant protein expressed in a cholinergic neuron and having the activity of high-affinity choline transporter.

Claim 105 (new): A isolated protein comprising a base sequence represented by Seq. ID No. 6.

Claim 106 (new): A substantially-purified and human-derived protein comprising an amino acid sequence where one or a few amino acids are deficient, substituted or added in the amino acid sequence represented by Seq. ID No.6, and having human high-affinity choline transporter activity.

Claim 107 (new): A fusion protein constructed by making cDNA encoding a fusion protein wherein the protein having high-affinity choline transporter activity has an activity of human-derived high-affinity choline transporter according to claims 105-106, and the protein having an activity of choline transporter and a marker protein and/or peptide tag are bound,

Claim 108 (new): A host cell containing an expression system which can express a human-derived protein expressed in a cholinergic neuron and having high-affinity choline transporter activity.

Claim 109 (new): The host cell according to claim 108, wherein the protein having high-affinity choline transporter activity has an activity of human-derived high-affinity choline transporter according to claim 105 or 106.

Claim 110 (new): A preparing method of a cell having an activity of human-derived high-affinity choline transporter characterized in introducing the gene or DNA according to claim 102 into a

cell whose function of a gene which encodes a protein having high-affinity choline transporter activity is deficient on its choromosome.

Claim 111 (new): A preparing method of a cell having high-affinity choline transporter activity characterized in introducing the gene or DNA according to claim 102 into a cell whose function of a gene which encodes a protein having high-affinity choline transporter activity is deficient on its chromosome, wherein the cell having high-affinity choline transporter activity is integrated with the DNA in its chromosome, and stably shows high-affinity choline transporter activity.

Claim 112 (new): A cell having high-affinity choline transporter activity being obtainable by the preparing method of a cell having high-affinity choline transporter activity according to claim 111.